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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,696	03/12/2007	Aimee L. Jackson	ROSA134293	3708
26389 7590 05/07/2010 CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347				
EXAMINER SMITH, CAROLYN L				
ART UNIT		PAPER NUMBER		
1631				
NOTIFICATION DATE		DELIVERY MODE		
05/07/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

efiling@cojk.com

### Office Action Summary

**Application No.**

10/577,696

**Applicant(s)**

JACKSON ET AL.

**Examiner**

Carolyn Smith

**Art Unit**

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 21-35, 37-46, 48-58, 67-75, 77-92 and 95 is/are pending in the application.
- 4a) Of the above claim(s) 52-58, 67-75, 77-92 and 95 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 21-35, 37-46 and 48-51 is/are rejected.
- 7) ☒ Claim(s) 1, 23, 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-646)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03122007, 07112008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's elections with traverse of Group I (claims 1-11, 21-35, 37-46, and 48-51), filed 3/18/10, are acknowledged. Claims 12-20, 36, 47, 59-66, 76, and 93-94 are cancelled. Claims 52-58, 67-75, 77-92, and 95 are withdrawn from consideration as being drawn to non-elected Groups.

Applicant's traversal is on the grounds that the art used in breaking unity is not prior to the date of the '180 provisional of the instant application.

The Applicant's request to combine Groups into one invention was found unpersuasive because of the following reasons:

It is noted that another reference can be applied to break unity. A prior art reference (with the technical feature of selecting and ranking siRNAs for silencing a target gene and position-specific base composition scoring) before 10/27/2003 is Brown et al. (US 2003/0166282).

The requirements are still deemed proper and are therefore made FINAL.

Drawings, filed 4/27/06, are accepted by the Examiner.

The information disclosure statements, filed 3/12/07 and 7/11/08, have been considered by the Examiner.

Claims herein under examination are 1-11, 21-35, 37-46, and 48-51.

### ***Specification***

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code, such as on page 60, line 20. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### ***Claim Objections***

Claims 1, 23, and 51 are objected to because of the following minor informalities:

Claim 1 (line 6) recites "a" with plural "motifs" which is awkward.

Claim 23 (line 2) recites "FastA" which should be completely capitalized.

Claim 51 recites "threshold" which should be in plural form.

Appropriate correction is requested.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11, 21-35, 37-46, and 48-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-11, 21-35, 37-46, and 48-51 are drawn to a process. A process is statutory subject matter under 35 U.S.C. 101 if: (1) it is tied to a particular machine or apparatus or (2) it transforms an article to a different state or thing (In re Bilski, 88 USPQ2d 1385 Fed. Cir. 2008).

The claimed subject matter is not limited to a particular apparatus or machine. To qualify as a statutory process, the claims should require use of a machine within the steps of the claimed subject matter or require transformation of an article to a different state or thing. Insignificant extra-solution activity in the claimed subject matter will not be considered sufficient to convert a process that otherwise recites only mental steps into statutory subject matter (In re Grams 12 USPQ2d 1824 Fed. Cir. 1989). Preamble limitations that require the claimed process to comprise machine implemented steps will not be considered sufficient to convert a process that otherwise recites only mental steps into statutory subject matter. It is noted that the instant claim 1 recites “ranking said plurality of different siRNAs”; however, this step is not a transformation of an article to a different state or thing. It is further noted that claims 1-11, 21-35, 37-46, and 48-51 do not explicitly require that the steps of the claimed method are performed on a machine. Applicant is cautioned against introduction of new matter in an amendment.

### *Claim Rejections – 35 USC §102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Brown et al. (US 2003/0166282 A1).

Brown et al. disclose a method of selecting from a plurality of siRNAs one or more siRNAs for silencing a target gene, each targeting a different target sequence in a transcript of a target gene (0008, 0010, 0018-0039, 0161-0163) comprising ranking siRNAs according to positional base compositions of corresponding targeted sequence motifs, wherein each targeted sequence motif comprises a portion of the target sequence and/or a sequence region flanking the target sequence and selecting one siRNA (0054, 0111-0112, 0161-0167), as stated in instant claims 1 and 2. Brown et al. disclose analyzing siRNAs by measuring percent identity and the greatest degree of matching using CLUSTAL with sequence alignment and through weighting, position-specific gap penalties and weight matrix choice, as well as BLASTP, BLASTN, FASTA (0110-0111, 0247, 0268) which represents determining a score for each siRNA using a position-specific score matrix and ranking siRNAs, as stated in instant claim 3.

Thus, Brown et al. anticipate instant claims 1-3.

Claims 1-2 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by McSwiggen (US 2003/0175950 A1).

McSwiggen discloses a method for selecting siRNAs for silencing a target gene (0013, 0024, 0223). Example 3 discloses the ranking and selecting step wherein the motif comprises the target sequence (0230-0240), as stated in instant claims 1 and 2.

Thus, McSwiggen anticipates instant claims 1 and 2.

***Conclusion***

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran, can be reached on (571) 272-0720.

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April 20, 2010

/Carolyn Smith/  
Primary Examiner  
AU 1631